

## General

### Title

Venous thromboembolism (VTE): percent of patients diagnosed with confirmed VTE that are discharged to home, home care, court/law enforcement or home on hospice care on warfarin with written discharge instructions that address all four criteria: compliance issues, dietary advice, follow-up monitoring, and information about the potential for adverse drug reactions/interactions.

### Source(s)

Specifications manual for national hospital inpatient quality measures, version 5.0b. Centers for Medicare & Medicaid Services (CMS), The Joint Commission; Effective 2015 Oct 1. various p.

## Measure Domain

### Primary Measure Domain

Clinical Quality Measures: Process

### Secondary Measure Domain

Does not apply to this measure

## Brief Abstract

### Description

This measure is used to assess the number of patients diagnosed with confirmed venous thromboembolism (VTE) that are discharged to home, home care, court/law enforcement or home on hospice care on warfarin with written discharge instructions that address all four criteria: compliance issues, dietary advice, follow-up monitoring, and information about the potential for adverse drug reactions/interactions.

### Rationale

In anticoagulation therapy programs, patient education is a vital component to achieve successful outcomes, and reducing hospital readmission rate. Patients benefit from education about the potential consequences of both their disease and its treatment (Institute for Clinical Systems Improvement [ICSI],

2006). Warfarin is commonly involved in adverse drug events (Ansell et al., 2008). Adverse drug events can include subtherapeutic clot formation and supertherapeutic hemorrhage. Anticoagulation therapy poses risks to patients due to complex dosing, requisite follow-up monitoring and inconsistent patient compliance. The use of standardized practices for anticoagulation therapy that includes patient/caregiver involvement may reduce the risk of adverse drug events (van Walraven et al., 2006).

The Joint Commission (TJC) National Patient Safety Goal "Reduce the likelihood of patient harm associated with the use of anticoagulant therapy" (2015) states that the organization provides education regarding anticoagulation therapy to patients/family that includes the importance of follow-up monitoring, compliance issues, dietary restrictions, and potential for adverse drug reactions and interactions.

## Evidence for Rationale

Ansell J, Hirsh J, Hylek E, Jacobson A, Crowther M, Palareti G. Pharmacology and management of the vitamin K antagonists: American College of Chest Physicians Evidence-Based Clinical Practice Guidelines (8th Edition). Chest. 2008 Jun;133(6 Suppl):160S-98S. [419 references] [PubMed](#)

Institute for Clinical Systems Improvement (ICSI). Anticoagulation therapy supplement. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2006 Apr. 49 p. [91 references]

Specifications manual for national hospital inpatient quality measures, version 5.0b. Centers for Medicare & Medicaid Services (CMS), The Joint Commission; Effective 2015 Oct 1. various p.

The Joint Commission (TJC). 2015 hospital national patient safety goals. Oakbrook Terrace (IL): The Joint Commission (TJC); 2015. 1 p.

van Walraven C, Jennings A, Oake N, Fergusson D, Forster AJ. Effect of study setting on anticoagulation control: a systematic review and metaregression. Chest. 2006 May;129(5):1155-66. [97 references] [PubMed](#)

## Primary Health Components

Venous thromboembolism (VTE); warfarin therapy; discharge instructions

## Denominator Description

Patients with confirmed venous thromboembolism (VTE) discharged on warfarin therapy (see the related "Denominator Inclusions/Exclusions" field)

## Numerator Description

Patients with documentation that they or their caregivers were given written discharge instructions or other educational material about warfarin that addressed all of the following:

- Compliance issues
- Dietary advice
- Follow-up monitoring
- Potential for adverse drug reactions and interactions

## Evidence Supporting the Measure

## Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

A systematic review of the clinical research literature (e.g., Cochrane Review)

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

## Additional Information Supporting Need for the Measure

Unspecified

## Extent of Measure Testing

Unspecified

## State of Use of the Measure

### State of Use

Current routine use

### Current Use

not defined yet

## Application of the Measure in its Current Use

### Measurement Setting

Hospital Inpatient

Transition

### Type of Care Coordination

Coordination between providers and patient/caregiver

### Professionals Involved in Delivery of Health Services

not defined yet

### Least Aggregated Level of Services Delivery Addressed

Single Health Care Delivery or Public Health Organizations

## Statement of Acceptable Minimum Sample Size

Specified

## Target Population Age

Age greater than or equal to 18 years

## Target Population Gender

Either male or female

# National Strategy for Quality Improvement in Health Care

## National Quality Strategy Aim

Better Care

## National Quality Strategy Priority

Effective Communication and Care Coordination

Making Care Safer

Person- and Family-centered Care

Prevention and Treatment of Leading Causes of Mortality

# Institute of Medicine (IOM) National Health Care Quality Report Categories

## IOM Care Need

Getting Better

Living with Illness

## IOM Domain

Effectiveness

Patient-centeredness

Safety

# Data Collection for the Measure

## Case Finding Period

Discharges October 1 through June 30

## Denominator Sampling Frame

Patients associated with provider

## Denominator (Index) Event or Characteristic

Clinical Condition

Institutionalization

Patient/Individual (Consumer) Characteristic

Therapeutic Intervention

## Denominator Time Window

not defined yet

## Denominator Inclusions/Exclusions

### Inclusions

Patients with confirmed venous thromboembolism (VTE) discharged on warfarin therapy

### Include:

Discharges with an *International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Principal or Other Diagnosis Code* of VTE (as defined in the appendices of the original measure documentation)

Discharged to home, home care or court/law enforcement

Discharged to home for hospice care

### Exclusions

Patients less than 18 years of age

Patients who have a length of stay (LOS) greater than 120 days

Patients enrolled in clinical trials

Patients without *Warfarin Prescribed at Discharge* (as defined in the Data Dictionary)

Patients without VTE confirmed by diagnostic testing

## Exclusions/Exceptions

not defined yet

## Numerator Inclusions/Exclusions

### Inclusions

Patients with documentation that they or their caregivers were given written discharge instructions or other educational material about warfarin that addressed all of the following:

Compliance issues

Dietary advice

Follow-up monitoring  
Potential for adverse drug reactions and interactions

Exclusions  
None

## Numerator Search Strategy

Institutionalization

## Data Source

Administrative clinical data  
Electronic health/medical record  
Paper medical record

## Type of Health State

Does not apply to this measure

## Instruments Used and/or Associated with the Measure

- Venous Thromboembolism (VTE) Initial Patient Population Algorithm Flowchart
- VTE-5: Venous Thromboembolism Warfarin Therapy Discharge Instructions Flowchart

## Computation of the Measure

### Measure Specifies Disaggregation

Does not apply to this measure

### Scoring

Rate/Proportion

### Interpretation of Score

Desired value is a higher score

### Allowance for Patient or Population Factors

not defined yet

### Standard of Comparison

not defined yet

# Identifying Information

## Original Title

VTE-5: venous thromboembolism warfarin therapy discharge instructions.

## Measure Collection Name

National Hospital Inpatient Quality Measures

## Measure Set Name

Venous Thromboembolism (VTE)

## Submitter

The Joint Commission - Health Care Accreditation Organization

## Developer

The Joint Commission - Health Care Accreditation Organization

## Funding Source(s)

All external funding for measure development has been received and used in full compliance with The Joint Commission's Corporate Sponsorship policies, which are available upon written request to The Joint Commission.

## Composition of the Group that Developed the Measure

Technical advisory panel of stakeholders. The list of participants is available at [http://www.jointcommission.org/assets/1/6/VTE\\_TAP\\_14-15.pdf](http://www.jointcommission.org/assets/1/6/VTE_TAP_14-15.pdf) .

## Financial Disclosures/Other Potential Conflicts of Interest

Expert panel members have made full disclosure of relevant financial and conflict of interest information in accordance with the Joint Commission's Conflict of Interest policies, copies of which are available upon written request to The Joint Commission.

## Measure Initiative(s)

Quality Check®

## Adaptation

This measure was not adapted from another source.

## Date of Most Current Version in NQMC

2015 Oct

## Measure Maintenance

This measure is reviewed and updated every 6 months.

## Date of Next Anticipated Revision

Unspecified

## Measure Status

This is the current release of the measure.

This measure updates a previous version: Specifications manual for national hospital inpatient quality measures, version 4.3b. Centers for Medicare & Medicaid Services (CMS), The Joint Commission; 2014 Apr. various p.

## Measure Availability

Source available from [The Joint Commission Web site](#) . Information is also available from the [QualityNet Web site](#) . Check The Joint Commission Web site and QualityNet Web site regularly for the most recent version of the specifications manual and for the applicable dates of discharge.

## Companion Documents

The following is available:

Hospital compare: a quality tool provided by Medicare. [internet]. Washington (DC): U.S. Department of Health and Human Services; [accessed 2015 May 27]. This is available from the [Medicare Web site](#) . See the related [QualityTools](#)  summary.

## NQMC Status

The Joint Commission originally submitted this NQMC measure summary to ECRI Institute on September 18, 2009. This NQMC summary was reviewed accordingly by ECRI Institute on November 10, 2009.

The Joint Commission informed NQMC that this measure was updated on October 25, 2010 and provided an updated version of the NQMC summary. This NQMC summary was updated accordingly by ECRI Institute on January 21, 2011.

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This NQMC summary was updated again by ECRI Institute on September 2, 2015. The information was not verified by the measure developer.

This NQMC summary was edited by ECRI Institute on November 16, 2015.

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## Production

### Source(s)

Specifications manual for national hospital inpatient quality measures, version 5.0b. Centers for Medicare & Medicaid Services (CMS), The Joint Commission; Effective 2015 Oct 1. various p.

## Disclaimer

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